

CLAIMS

We claim:

1. A method of configuring a communication port for communication with a device, comprising the steps of:

providing a memory module having communication port configuration data that is associated with the device stored thereon;

5 associating the memory module with the communication port; and
configuring the communication port based on the communication port configuration data stored on the memory module.

2. A method as recited in Claim 1, wherein the memory module is a non-volatile memory cartridge.

3. A method as recited in Claim 2, wherein the step of associating the memory module with the communication port comprises the steps of:

associating a memory module slot with the communication port; and
inserting the non-volatile memory cartridge into the memory module slot.

4. A method as recited in Claim 1, wherein the communication port is a serial port and the communication port configuration data comprises a baud rate and a format for arranging data bits, stop bits, and parity bits in a serial transmission.

5. A method of controlling a first device by a second device via communication with a network translation device, comprising the steps of:

determining at the network translation device if the first device has functionality that is controllable via a first protocol; and

5 sending first device functionality information from the network translation device to the second device via the first protocol if the first device has functionality that is controllable via the first protocol.

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6. A method as recited in Claim 5, further comprising the following steps before the step of sending first device functionality information from the network translation device to the second device:

- 5 notifying the second device via the first protocol that the first device has functionality that is controllable via the first protocol if the first device has functionality that is controllable via the first protocol; and
- receiving a request via the first protocol from the second device for first device functionality information at the network translation device.

7. A method as recited in Claim 5, further comprising the steps of: sending a command for invoking functionality of the first device from the second device to the network translation device via the first protocol if the first device has functionality that is controllable via the first protocol;

- 5 translating the command from a first protocol format into a second protocol format at the network translation device; and
- sending the translated command from the network translation device to the first device via a second protocol.

8. A method as recited in Claim 5, wherein the step of determining at the network translation device if the first device has functionality that is controllable via the first protocol comprises the steps of:

- 5 associating a memory module with the first device at the network translation device; and
- determining if the memory module contains data associated with functionality provided by the first device.

9. A method as recited in Claim 8, wherein the step of sending first device functionality information from the network translation device to the second device if the first device has functionality that is controllable via the first protocol comprises the step of:

- 5 sending at least one message containing the data associated with functionality provided by the first device from the network translation device to the second device

via the first protocol if the memory module contains data associated with functionality provided by the first device.

10. A method as recited in Claim 5, wherein the first protocol is selected from the group consisting of Jini protocol, Salutation protocol, and Universal Plug and Play (UPnP) protocol.

11. A method of controlling a first device by a second device via communication with a network translation device, comprising the steps of:

configuring a communication port on the network translation device for communication with the first device, comprising the steps of:

- 5 providing a memory module having communication port configuration data that is associated with the first device stored thereon;
- associating the memory module with the communication port; and
- configuring the communication port based on the communication port configuration data stored on the memory module;
- 10 determining if the memory module contains data associated with functionality provided by the first device that is controllable via a first protocol; and
- sending at least one message containing the data associated with the functionality provided by the first device from the network translation device to the second device via the first protocol if the memory module contains data associated
- 15 with functionality provided by the first device that is controllable via the first protocol.

12. A method as recited in Claim 11, further comprising the steps of:

- sending a command for invoking functionality of the first device from the second device to the network translation device via the first protocol if the memory module contains data associated with functionality provided by the first device that is
- 5 controllable via the first protocol;
- translating the command from a first protocol format into a second protocol format at the network translation device; and
- sending the translated command from the network translation device to the first device over the configured communication port via the second protocol.

13. A network translation device, comprising:
a communication port;
a memory module having communication port configuration data stored thereon, the memory module being associated with the communication port; and
5 a processor that is communicatively coupled to the memory module and that configures the communication port based on the communication port configuration data stored on the memory module.

14. A network translation device as recited in Claim 13, wherein the memory module is a non-volatile memory cartridge.

15. A network translation device as recited in Claim 13, further comprising:
data associated with functionality provided by a first device stored on the memory module.

16. A network translation device as recited in Claim 15, wherein the processor is configured to send at least one message containing the data associated with functionality provided by the first device to a second device.

17. A network translation device as recited in Claim 16, wherein the network translation device further comprises:

a memory that is communicatively coupled to the processor and having command translation data stored thereon.

18. A network translation device as recited in Claim 17, wherein the processor is configured to translate a command received from the second device for invoking functionality of the first device and having a first protocol format into a second protocol format based on the command translation data, and is further
5 configured to send the translated command to the first device.

19. A system for configuring a communication port for communication with a device, comprising:

means for providing a memory module having communication port configuration data that is associated with the device stored thereon;

5 means for associating the memory module with the communication port; and

means for configuring the communication port based on the communication port configuration data stored on the memory module.

20. A system as recited in Claim 19, wherein the memory module is a non-volatile memory cartridge.

21. A system as recited in Claim 20, wherein the means for associating the memory module with the communication port comprises:

means for associating a memory module slot with the communication port; and

5 means for inserting the non-volatile memory cartridge into the memory module slot.

22. A system as recited in Claim 19, wherein the communication port is a serial port and the communication port configuration data comprises a baud rate and a format for arranging data bits, stop bits, and parity bits in a serial transmission.

23. A system for controlling a first device by a second device via communication with a network translation device, comprising:

means for determining at the network translation device if the first device has functionality that is controllable via a first protocol; and

5 means for sending first device functionality information from the network translation device to the second device via the first protocol if the first device has functionality that is controllable via the first protocol.

24. A system as recited in Claim 23, further comprising:

means for notifying the second device via the first protocol that the first device has functionality that is controllable via the first protocol if the first device has functionality that is controllable via the first protocol; and

5 means for receiving a request via the first protocol from the second device for first device functionality information at the network translation device;

wherein the means for sending first device functionality information from the network translation device to the second device is responsive to the means for receiving a request via the first protocol from the second device for first device

10 functionality information at the network translation device.

25. A system as recited in Claim 23, further comprising:

means for sending a command for invoking functionality of the first device from the second device to the network translation device via the first protocol if the first device has functionality that is controllable via the first protocol;

5 means for translating the command from a first protocol format into a second protocol format at the network translation device; and

means for sending the translated command from the network translation device to the first device via a second protocol.

26. A system as recited in Claim 23, wherein the means for determining at the network translation device if the first device has functionality that is controllable via the first protocol comprises:

5 means for associating a memory module with the first device at the network translation device; and

means for determining if the memory module contains data associated with functionality provided by the first device.

27. A system as recited in Claim 26, wherein the means for sending first device functionality information from the network translation device to the second device if the first device has functionality that is controllable via the first protocol comprises:

5 means for sending at least one message containing the data associated with functionality provided by the first device from the network translation device to the

second device via the first protocol if the memory module contains data associated with functionality provided by the first device.

28. A system as recited in Claim 23, wherein the first protocol is selected from the group consisting of Jini protocol, Salutation protocol, and Universal Plug and Play (UPnP) protocol.

29. A system for controlling a first device by a second device via communication with a network translation device, comprising:

means for configuring a communication port on the network translation device for communication with the first device, comprising:

5 means for providing a memory module having communication port configuration data that is associated with the first device stored thereon;

means for associating the memory module with the communication port; and

10 means for configuring the communication port based on the communication port configuration data stored on the memory module;

means for determining if the memory module contains data associated with functionality provided by the first device that is controllable via a first protocol; and

15 means for sending at least one message containing the data associated with the functionality provided by the first device from the network translation device to the second device via the first protocol if the memory module contains data associated with functionality provided by the first device that is controllable via the first protocol.

30. A system as recited in Claim 29, further comprising:

5 means for sending a command for invoking functionality of the first device from the second device to the network translation device via the first protocol if the memory module contains data associated with functionality provided by the first device that is controllable via the first protocol;

means for translating the command from a first protocol format into a second protocol format at the network translation device; and

means for sending the translated command from the network translation device to the first device over the configured communication port via the second protocol.

31. A computer program product for configuring a communication port for communication with a device, comprising:

a computer readable storage medium having computer readable program code embodied therein, the computer readable program code comprising:

5 computer readable program code for providing a memory module having communication port configuration data that is associated with the device stored thereon;

computer readable program code for associating the memory module with the communication port; and

10 computer readable program code for configuring the communication port based on the communication port configuration data stored on the memory module.

32. A computer program product as recited in Claim 31, wherein the memory module is a non-volatile memory cartridge.

33. A computer program product as recited in Claim 32, wherein the computer readable program code for associating the memory module with the communication port comprises:

5 computer readable program code for associating a memory module slot with the communication port; and

computer readable program code for inserting the non-volatile memory cartridge into the memory module slot.

34. A computer program product as recited in Claim 31, wherein the communication port is a serial port and the communication port configuration data comprises a baud rate and a format for arranging data bits, stop bits, and parity bits in a serial transmission.

35. A computer program product for controlling a first device by a second device via communication with a network translation device, comprising:

a computer readable storage medium having computer readable program code embodied therein, the computer readable program code comprising:

- 5 computer readable program code for determining at the network translation device if the first device has functionality that is controllable via a first protocol; and
computer readable program code for sending first device functionality information from the network translation device to the second device via the first protocol if the first device has functionality that is controllable via the first protocol.

36. A computer program product as recited in Claim 35, further comprising:

- computer readable program code for notifying the second device via the first protocol that the first device has functionality that is controllable via the first protocol
5 if the first device has functionality that is controllable via the first protocol; and
computer readable program code for receiving a request via the first protocol from the second device for first device functionality information at the network translation device;

- wherein the computer readable program code for sending first device
10 functionality information from the network translation device to the second device is responsive to the computer readable program code for receiving a request via the first protocol from the second device for first device functionality information at the network translation device.

37. A computer program product as recited in Claim 35, further comprising:

- computer readable program code for sending a command for invoking functionality of the first device from the second device to the network translation
5 device via the first protocol if the first device has functionality that is controllable via the first protocol;

- computer readable program code for translating the command from a first protocol format into a second protocol format at the network translation device; and
computer readable program code for sending the translated command from the
10 network translation device to the first device via a second protocol.

38. A computer program product as recited in Claim 35, wherein the computer readable program code for determining at the network translation device if the first device has functionality that is controllable via the first protocol comprises:

- computer readable program code for associating a memory module with the
- 5 first device at the network translation device; and
- computer readable program code for determining if the memory module contains data associated with functionality provided by the first device.

39. A computer program product as recited in Claim 38, wherein the computer readable program code for sending first device functionality information from the network translation device to the second device if the first device has functionality that is controllable via the first protocol comprises:

- 5 computer readable program code for sending at least one message containing the data associated with functionality provided by the first device from the network translation device to the second device via the first protocol if the memory module contains data associated with functionality provided by the first device.

40. A computer program product as recited in Claim 35, wherein the first protocol is selected from the group consisting of Jini protocol, Salutation protocol, and Universal Plug and Play (UPnP) protocol.

41. A computer program product for controlling a first device by a second device via communication with a network translation device, comprising:

- a computer readable storage medium having computer readable program code embodied therein, the computer readable program code comprising:
- 5 computer readable program code for configuring a communication port on the network translation device for communication with the first device, comprising:
 - computer readable program code for providing a memory module having communication port configuration data that is associated with the first device stored thereon;
 - 10 computer readable program code for associating the memory module with the communication port; and

computer readable program code for configuring the communication port based on the communication port configuration data stored on the memory module;

- 15 computer readable program code for determining if the memory module contains data associated with functionality provided by the first device that is controllable via a first protocol; and

- computer readable program code for sending at least one message containing the data associated with the functionality provided by the first device from the
20 network translation device to the second device via the first protocol if the memory module contains data associated with functionality provided by the first device that is controllable via the first protocol.

42. A computer program product as recited in Claim 41, further comprising:

- computer readable program code for sending a command for invoking functionality of the first device from the second device to the network translation
5 device via the first protocol if the memory module contains data associated with functionality provided by the first device that is controllable via the first protocol;

computer readable program code for translating the command from a first protocol format into a second protocol format at the network translation device; and

- computer readable program code for sending the translated command from the
10 network translation device to the first device over the configured communication port via the second protocol.